

June 18, 1975

Mr. E. James Ellis
Marketing Services Manager
Sherwood Medical Industries, Inc.
1831 Olive Street
St. Louis, Mo. 63103.

Dear Mr. Ellis,

You of course have my permission to reprint an additional 1,000 copies of my paper, "The Gastrointestinal Sump Tube", which appeared in the August, 1969, edition of SURGERY.

It will, of course, be necessary to obtain permission from the C. V. Mosby Co.

Our letters have crossed in the mail, yours having been typed June 9, and mine June 10. My letter may not have been delivered to you personally, since it was addressed to the Sherwood Medical Industries, Inc., without designation of a specific individual. I therefore repeat here what was the message of that letter.

I find that many who use the tube would be helped if more explicit directions were to be packaged with the tube.

I attach a set of directions. This is useful whether or not fluoroscopic control is used. These directions are explicit enough to permit avoidance of several difficulties, especially plugging of the sump channel.

Although the tube functions well when given careful attention, I believe it would work better if it were size 18 instead of size 16. At one time, if I recall correctly, both sizes were available. Is size 18 available today?

I would much appreciate hearing from you and take this occasion to express my thanks to you for your interest in marketing this tube.

Sincerely,


Clarence Dennis, M.D., Ph.D.
Professor, Department of Surgery

INTUBATION OF THE SMALL INTESTINE with the
GASTRO-INTESTINAL SUMP TUBE

Insertion without fluoroscopy involves these steps:

1. The tube is passed into the stomach via one nostril.
2. Twenty c.c. of air is inserted into the balloon, and the tube is withdrawn to establish positioning at the gastro-esophageal junction; this can be confirmed by deep inspiration, which draws the tube inward some 1 to 2 cm.
3. The patient is placed forward of being on the right side, and the balloon is emptied.
4. The gastric walls are separated by a quick insufflation of $3/4$ liter of air, using a resuscitator bag.*
5. The tube is advanced 12 to 15 cm. in the hope it will fall freely into the pylorus.
6. The stomach is emptied, and 15 or 20 cm. more slack is provided by advancing the tube.
7. Two and one-half c.c. Hg is quickly injected into the balloon to initiate peristalsis to carry it through into the duodenum.
8. Passage into the descending duodenum is recognized by duodenal peristalsis-induced movements of the piston of a dry glass 10-c.c. syringe attached to the balloon line after injection of 3 to 4 c.c. of air.
9. Further passage is assisted by appropriate gravitational positioning of the patient.
10. The balloon may have 6 to 8 c.c. of air in it while low in the descending duodenum, but full inflation to 20 c.c. should await passage to the neighborhood of the ligament of Treitz to avoid antiperistaltic return to the stomach.
11. The tube will pass down the small bowel, and no attachment at the nose is needed in cooperative patients.

*Such as the "Hope Resuscitator" of Ohio Medical Products, put out by Airco. This is equipped with an adaptor $5/8$ "OD on one end and $5/16$ " on the other, which facilitates connection to the suction lumen of the sump tube.

N.B. It is important that constant rather than intermittent suction be applied to the suction line. With intermittent suction there is danger that intestinal content may enter and plug the sump line. If the patient is to be transferred or if for other reason suction must be interrupted, it is helpful to fill the sump line with isotonic salt solution and plug the fitting to prevent entry of intestinal content into it. This solution can be blown through into the intestine with air after suction has been re-established. Suction need rarely exceed 150 mm.Hg, and higher levels induce bleeding and focal mucosal necrosis.

C. Dennis, M.D.
June 10, 1975

